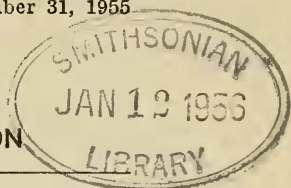


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



A NEW SPECIES OF BAT (GENUS *MYOTIS*) FROM
COAHUILA, MÉXICO

BY ROLLIN H. BAKER

On the evening of June 24, 1952, Albert A. Alcorn shot a small bat as it circled over a water-filled earthen tank situated in an open, intermontane valley near Bella Unión, Coahuila. This unique bat belongs to the genus *Myotis* but owing to its small size and flattened skull is not assignable to any known species of this genus; the bat is named and described as follows:

Myotis planiceps new species

Type.—Male, adult, skin and skull, No. 48242, Univ. Kansas Mus. Nat. Hist.; 7 mi. S and 4 mi. E Bella Unión, 7200 ft., Coahuila; 24 June 1952; obtained by Albert A. Alcorn, original number 920.

Distribution.—Known only from the type locality.

Diagnosis.—Size small for the genus, forearm distinctively short (see measurements); ears and membranes dark; pelage glossy and long (maximum length of hairs on middle of back, 8.2 mm.), hairs of upper parts basally dark and tipped with (*j* 16) Cinnamon-Brown (capitalized color term is that of Ridgway, Color Standards and Color Nomenclature, Washington, D. C., 1912), hairs of underparts basally black and tipped with buffy; skull small and flattened (see figure 1), rostrum narrowing anteriorly; teeth small; first and second premolars, both above and below, when viewed from occlusal surfaces, approximately the same size and uncrowded.

Comparisons.—*Myotis planiceps* is distinguished from all other North American *Myotis* by its short forearm, greatly flattened cranium and small teeth. Superficially, *M. planiceps* bears some resemblance to the three species, *Myotis californicus* (Audubon and Bachman), *Myotis subulatus* (Say) and *Myotis lucifugus* (LeConte), but differs from them in the above respects and also in having smaller ears, a more pointed rostrum and the occlusal surfaces of the 1st and 2nd premolars, both upper and lower, more nearly equal. From *M. californicus*, *M. planiceps* differs also in having more prominent metalophs and hypocones on the first and second upper molars. From *M. subulatus*, *M. planiceps* differs also in having more prominent metalophs and protoconules on the first and second upper molars and in having the crown of the third upper molar more shortened anteroposteriorly with no hypocone. From *M. lucifugus*, *M. planiceps* differs also in having a smaller hind foot, a slight keel on the calcar, less developed metalophs and hypocones on the first and second upper molars, and crown of the third upper molar more shortened anteroposteriorly with no hypocone and metaconule.

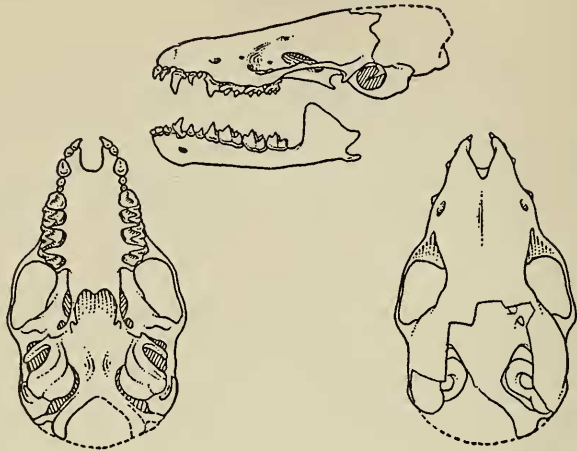


Fig. 1. *Myotis planiceps*, No. 48242, Univ. Kansas Mus. Nat. Hist., holotype. From left to right, ventral, lateral with lower jaw, and dorsal views of skull. All X3.

Remarks.—Probably *M. planiceps* is more closely allied to *M. californicus* than to any other *Myotis*. The cranium of *M. planiceps* is much more flattened than in *M. subulatus*. This flatness in *M. planiceps* is easily seen even though the hindmost part of the braincase is gone (see fig. 1). The occlusal surface of the upper molariform teeth is small in comparison with the area of the palatal surface. The distance across the third upper molars, from the outer side of one tooth to the outer side of the other, is 4.9, and the space across the palate between the inner borders of these two teeth measures 2.5.

This one bat was taken at 7200 feet elevation in a heavily grazed valley surrounded by higher mountains covered with boreal forests. It is suspected that this species lives in montane areas.

Measurements.—Measurements, in millimeters, of the holotype are: total length, 76; length of tail vertebrae, 25; length of hind foot, 8; height of ear from notch, 10; length of forearm, 26.5; length of thumb, 3.8; length of third metacarpal, 24.3; length of fifth metacarpal, 23.3; condylobasal length of skull, 13.3; zygomatic breadth, 8.1; least interorbital constriction, 3.4; breadth of braincase, 7.1; mastoid breadth, 7.2; palatal length, 6.7; maxillary breadth, across M3, 4.9; length of mandible, 7.3; length of maxillary tooth-row, 4.9; length of mandibular tooth-row, 6.2.

Specimen examined.—One, from the type locality.

Transmitted June 8, 1955.